SQUAMOUS CARCINOMA OF NASOPHARYNX IN A CHILD

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MALIGNANCY of the nasopharynx is uncommon in children; 172 cases have been reported in the English literature in persons aged 0 to 15 years.[1] The lesions may be perplexing because the symptoms are similar to those of benign conditions which occur in the nasopharynx during childhood. The following case report illustrates this problem.

CASE REPORT

R. S. is a 10-year-old black male who in September 1971 came to his private physician with complaints of frontal headache and pain in the right ear; he was treated symptomatically. In Ocotber 1971 the patient had repeated epistaxis. He was seen at various hospitals in Brooklyn, including Kings County Hospital, where extensive hematologic studies were performed and were negative. In addition the child had episodes of nausea, vomiting, and other nonspecific complaints. Since none of his symptoms apparently was related to organic processes, a tentative diagnosis of psychosomatic disease was made. The child, however, continued to have recurrent epistaxis.

In December 1971 he was referred to the Otolaryngology Service of Kings County Hospital. General physical examination at that time was negative. On otorhinolaryngological examination a large nasopharyngeal mass was found; it displaced the soft palate slightly anteriorly and inferiorly. It was dark red and had a nonulcerated surface upon which many blood vessels were seen. Gentle palpation of the mass resulted in profuse bleeding, which necessitated posterior nasal packing and the transfusion of three units of blood. Radiographs did not reveal erosion of the base of the skull. The working diagnosis was juvenile angiofibroma. During attempted angiogram the patient began to bleed

spontaneously from the nasopharynx. He was taken directly to the operating room. The external carotids were isolated bilaterally and ligated above the lingual artery. The soft palate was split in the midline and retracted, and the mass was excised. The mass was on the right posterolateral surface and weighed 44 gm. On histopathologic examination it was reported to be an undifferentiated squamous-cell carcinoma. The patient received 5,000 rads of cobalt-60 to the primary tumor over five weeks, and 5,000 rads was also administered over a four-week period to both sides of the neck. The treatment commenced December 22, 1971, and was completed on March 2, 1972. Abdominal pain and vomiting recurred. Special studies revealed no evidence of metastasis.

Six weeks after radiation, masses 3 × 4 cm. and 2 × 3 cm. in diameter were found in the right and left jugulodigastric regions respectively. Bilateral staged radical neck dissections were performed. Recovery was uneventful. Approximately 11 months from the time of diagnosis, there has been no evidence of recurrence.

Comments

The topographical location, clinical appearance, and behavior of the neoplasm clearly overshadowed all the constitutional symptoms which the patient experienced. The history of repeated nosebleed and the dramatic response to the lightest palpation suggested juvenile angiofibroma. It seemed appropriate to identify the tributary vessel; this was attempted. It is very rare for a malignant lesion of the pharynx, especially the nasopharynx, in an adult to bleed heavily after palpation. Documentation of the manner in which these tumors behave in children has not been found in the literature. One of us (A.L.) in 1965 participated in the excision of a recurrent bleeding juvenile angiofibroma in a teen-age patient on a semiemergency basis; the result was favorable. In our case, leakage of blood continued despite thorough nasal packing, and control of the hemorrhage was obviously necessary. This could be accomplished best with the help of proper visualization. Since the major vessels of the neck were controlled, operative angiographic studies were waived.

In children squamous-cell carcinoma is certainly rarer than malignant tumors of mesodermal origin. English literature on nasopharyngeal tumors does not clearly provide adequate information for analysis of

histopathologic type and age. Nishiyama, Batsakis, and Weaver[2] report two cases of exclusively epithelial malignant tumors in children; these lesions are much rarer than the mesodermal and mixed malignant neoplasms.

REFERENCES

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2. Nishiyama, R. H., Batsakis, J. G., and Weaver, D. K.: Nasopharyngeal carcinomas in children. *Arch. Surg. 94*:214-17, 1967.